APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,858	01/19/2004	Tzueng-Yau Lin	MTKP0044USA	1857

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27765          7590          11/19/2007
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EXAMINER
SAUNDERS JR, JOSEPH

ART UNIT	PAPER NUMBER
2615	

NOTIFICATION DATE	DELIVERY MODE
11/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
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PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 August 2007_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15, 19 and 20_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _6-10_ is/are allowed.

6)☒ Claim(s) _1-5, 11-15, 19 and 20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _19 January 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☒ All   b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the communications filed August 22, 2007.

Claims 1 – 15, 19, and 20 are currently pending and considered below.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1 – 3 and 11 – 13 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Van Steenbrugge (US 6,076,062), hereinafter <u>Van Steenbrugge</u>, in

view of Asano et al. (US 2006/0026444 A1), hereinafter <u>Asano</u>.

Claim 1: <u>Van Steenbrugge</u> discloses an audio processing circuit (Figure 6) for receiving

a first stream complying with a first standard (MPEG) and generating a second stream

complying with a second standard which is a digital interface standard (IEC958)

(Column 2 Lines 2 – 7), the first stream includes a plurality of frames, each of the

frames includes a plurality of fields (Figures 4A – D), the audio processing circuit

comprises: a stream buffer for storing the frames of the first stream ("FIFO 28 is

provided that by way of example accommodates 8 k Bytes as generally required for

intermediate storage of MPEG data," Column 5 Lines 33 – 35); a stream recovering

circuit electrically connected to the stream buffer for detecting at least one of the

plurality of fields in the frames (TD1315, Figure 10), modifying at least one of the

plurality of fields according to the first standard, and generating modified frames ("If in

block 122 an Audio bitstream is detected, in block 1126 it is detected whether a Gap

occurs. If "Gap", in block 120 a PAUSE data burst is sent," Column 8 Lines 10 – 12); a

first buffer electrically connected to the stream recovering circuit for storing the modified

frames; and a burst circuit electrically connected to the first buffer for partitioning the

modified frames into a plurality of payload sections, adding a preamble to each of the

payload sections, and forming the second stream (TD1315 packages the burst payloads

as user data in IEC958 format frames including a busrt_preamble and a payload and

therefore since the signal is a "burst" of data the first buffer is included and electrically

connected within the recovering circuit for storing the modified frames before

transmission, Column 8 Lines 45 – 57).

Van Steenbrugge *does not disclose* wherein the changed field is a copyright field

and copyright management information is changed. Asano also discloses an MPEG

stream and discloses a method of copyright protection in which SCMS information is

used to determine if an MPEG stream audio mode is "Copy Free" "One Generation

Copy Allowed" or "Copy Prohibited" Asano does not disclose how to change the copy

control bits. Since Van Steenbrugge discloses changing the content of a field in an

MPEG stream, it would have been obvious to one of ordinary skill in the art to use the

sync information provided in the MPEG stream to identify the two bit responsible for the

copy control information and use the technique disclosed by Van Steenbrugge to

change the bits from a "One Generation Copy Allowed" to a "Copy Prohibited" state

after the disk has been read once (Asano, Paragraph 184 and 185 and Figure 5).

Claim 2: Van Steenbrugge and Asano disclose the audio processing circuit of claim 1

wherein the second standard is S/PDIF standard (IEC958, Van Steenbrugge).

Claim 3: Van Steenbrugge and Asano disclose the audio processing circuit of claim 1

wherein the first stream is retrieved from an optical storage disk (DVD player, Van

Steenbrugge).

Claim 11: Van Steenbrugge discloses a method for transferring a first stream complying

with a first standard (MPEG) into a second stream complying with a second standard

which is a digital interface standard (IEC958), the first stream includes a plurality of

frames, each of the frames includes a plurality of fields (Figures 4A – D), the method

comprises the steps of: detecting at least one of the plurality of fields in the frames,

modifying at least one of the plurality of fields according to the first standard, and

generating modified frames ("If in block 122 an Audio bitstream is detected, in block

1126 it is detected whether a Gap occurs. If "Gap", in block 120 a PAUSE data burst is

sent," Column 8 Lines 10 – 12); and partitioning the modified frames into a plurality of

payload sections, adding a preamble to each of the payload sections, and forming the

second stream (TD1315 packages the burst payloads as user data in IEC958 format

frames including a busrt_preamble and a payload and therefore since the signal is a

"burst" of data the first buffer is included and electrically connected within the recovering

circuit for storing the modified frames before transmission, Column 8 Lines 45 – 57).

Van Steenbrugge *does not disclose* wherein the changed field is a copyright field

or an audio mode filed. Asano also discloses an MPEG stream and discloses a method

of copyright protection in which SCMS information is used to determine if an MPEG

stream audio mode is "Copy Free" "One Generation Copy Allowed" or "Copy Prohibited"

Asano does not disclose how to change the copy control bits. Since Van Steenbrugge

discloses changing the content of a field in an MPEG stream, it would have been

obvious to one of ordinary skill in the art to use the sync information provided in the

MPEG stream to identify the two bit responsible for the copy control information and use

the technique disclosed by Van Steenbrugge to change the bits from a "One Generation

Copy Allowed" to a "Copy Prohibited" state after the disk has been read once (Asano,

Paragraph 184 and 185 and Figure 5).

Claim 12: Van Steenbrugge and Asano disclose the method of claim 11 wherein the

first stream is retrieved from an optical storage disk (DVD player, Van Steenbrugge).

Claim 13: Van Steenbrugge and Asano disclose method of claim 11 wherein the

second standard is S/PDIF standard (IEC958, Van Steenbrugge).

4.   Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Van Steenbrugge and Asano in view of Fujishita (US 6,988,013 B1), hereinafter

Fujishita.

Claim 4: Van Steenbrugge and Asano disclose the audio processing circuit of claim 1

further comprising: a decoding circuit (MC decoder) electrically connected to the stream

buffer (FIFO 28) for decoding the frames retrieved from the stream buffer; a second

buffer electrically connected to the decoding circuit for storing decoded frames

generated by the decoding circuit (Intermediate buffer 58, Figure 7 of Van

Steenbrugge). Van Steenbrugge and Asano *do not disclose* a digital to analog converter

electrically connected to the second buffer for converting the decoded frames received

from the second buffer to analog signals however Fujishita discloses a DVD player with

circuitry to decode an MPEG audio stream and output multi-channel audio. It would

have been obvious to one of ordinary skill in the art at the time of the invention to

include a D/A converter as disclosed by Fujishita after the decoder to allow for output of

the multi-channel decoded signal to be converted into an analog signal, amplified, and

sent to the appropriate speaker to output sound (Fujishita, Column 4 Lines 8 – Column

5 Line 13).

Claim 14: Van Steenbrugge and Asano disclose the method of claim 11 further

comprising decoding the frames of the first stream. Van Steenbrugge *does not disclose*

converting the decoded frames into analog signals however Fujishita discloses a DVD

player with circuitry to decode an MPEG audio stream and output multi-channel audio. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

include a D/A converter as disclosed by Fujishita after the decoder to allow for output of

the multi-channel decoded signal to be converted into an analog signal, amplified, and

sent to the appropriate speaker to output sound (Fujishita, Column 4 Lines 8 – Column

5 Line 13).

5.   Claims 5, 15, 19, and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Van Steenbrugge and Asano in view of Matsuura et al. (US

2002/0181600), hereinafter Matsuura.

Claim 5: Van Steenbrugge and Asano disclose the audio processing circuit of claim 1

but does not disclose wherein a decoding circuit and the stream recovering circuit are

integrated into an audio processor of the audio processing circuit. Matsuura discloses a

method for converting a data stream of a first format possibly containing an error in to a

correct data stream of a second format. Matsuura shows a TS separator that decodes

or parses the mpeg stream similar to block 90 of Van Steenbrugge and Matsuura further

discloses an error detecting and correcting unit that repackages the signal similar to

block 32 Van Steenbrugge. Matsuura further shows both of separator and the error

detecting and correcting unit being integrated into an audio processor (Figure 5 of

Matsuura and Figure 10 of Van Steenbrugge). It would have been obvious to one of

ordinary skill in the art at the time of the invention to integrate the blocks 90 and 98 of

the invention of <u>Van Steenbrugge</u> and <u>Asano</u> since having the decoder and error

detecting and correcting integrated into an audio processor as disclosed by <u>Matsuura</u>

eliminates the possibility of an error being passed on to a unit, similar to block 90,

responsible for repackaging the stream into a second format and as a result a more

accurate stream is obtained (<u>Matsuura</u>, Paragraphs 131 and 132).

Claim 15: <u>Van Steenbrugge</u> and <u>Asano</u> disclose the method of claim 11 but *do not*

disclose wherein the modifying step further comprises omitting at least one redundant

bit if any redundant bit exists in the frames of the first stream. <u>Matsuura</u> discloses a

method for converting a data stream of a first format possibly containing an error in to a

correct data stream of a second format. <u>Matsuura</u> further discloses truncating or

omitting redundant or extra bits in a frame when a synchronization error has occurred

(Paragraph 94). It would have been obvious to one of ordinary skill in the art at the time

of the invention to eliminate bits from a frame upon detecting an error as disclosed by

<u>Matsuura</u> in the system disclosed by <u>Van Steenbrugge</u> and <u>Asano</u> since doing so allows

for the second data stream formed from a corrected first data stream to be more

accurate then if the first stream was not corrected (<u>Matsuura</u>, Paragraph 131).

Claim 19: <u>Van Steenbrugge</u> and <u>Asano</u> disclose the method of claim 11 but *do not*

disclose wherein the modifying step further comprises abandoning at least one improper

bit which is not capable of being modified to conform with the first standard if any

improper bit exists in the frames of the first stream. <u>Matsuura</u> discloses a method for

converting a data stream of a first format possibly containing an error in to a correct data stream of a second format. Matsuura further discloses truncating or omitting redundant or extra bits in a frame when a synchronization error has occurred (Paragraph 94). It would have been obvious to one of ordinary skill in the art at the time of the invention to eliminate bits from a frame upon detecting an error as disclosed by Matsuura in the system disclosed by Van Steenbrugge and Asano since doing so allows for the second data stream formed from a corrected first data stream to be more accurate then if the first stream was not corrected (Matsuura, Paragraph 131).

Claim 20: Van Steenbrugge and Asano disclose the method of claim 11 but *do not disclose* wherein the modifying step further comprises modifying errors in the fields of the frames of the first stream. Matsuura discloses a method for converting a data stream of a first format possibly containing an error in to a correct data stream of a second format. Matsuura further discloses truncating or omitting redundant or extra bits in a frame when a synchronization error has occurred (Paragraph 94). It would have been obvious to one of ordinary skill in the art at the time of the invention to eliminate bits from a frame upon detecting an error as disclosed by Matsuura in the system disclosed by Van Steenbrugge and Asano since doing so allows for the second data stream formed from a corrected first data stream to be more accurate then if the first stream was not corrected (Matsuura, Paragraph 131).

Allowable Subject Matter

6.   Claims 6 – 10 are allowed for the reasons presented in Applicant's arguments dated August 22, 2007 with regards to claim 6 found on page 7.

Response to Arguments

7.   Applicant's arguments with regards to claims 1 – 5 filed August 22, 2007 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "copy once" and "no copy") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the limitation of a "copyright field" was previously addressed with regards to previously rejected claim 17 which is now cancelled and the reasons for the previous rejection of claim 17 have been applied to claim 1. Therefore, Applicant's arguments that none of the cited prior art discloses modifying the copyright field to change copyright management information is not persuasive.

8.   Applicant's arguments, see page 7, filed August 22, 2007, with respect to claim 6 have been fully considered and are persuasive. The rejection of claims 6 – 10 have been withdrawn.

9.   Applicant's arguments with regards to claims 11 – 15, 19, and 20 filed August 22,

2007 have been fully considered but they are not persuasive. In response to applicant's

argument that the references fail to show certain features of applicant's invention, it is

noted that the features upon which applicant relies (i.e., "mono" and "stereo") are not

recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re*

Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the limitation of

an "audio mode field" was previously addressed with regards to previously rejected

claim 18 which is now cancelled and the reasons for the previous rejection of claim 18

have been applied to claim 11. Therefore, Applicant's arguments pertaining to "PAUSE

data-bursts" are moot.

Conclusion

10.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SINH TRAN
SUPERVISORY PATENT EXAMINER

JS
November 13, 2007